Examples of Mobile/Portable All-Mode HF Transceivers

	Model	*VHF/UHF Coverage*	*Power Output*	*General Coverage Receive*	*Detachable Control Head*	*Receives FM Broadcast*
Alinco	DX-70	50 MHz	100 watts	Yes	Yes	No
Icom	IC-706MKIIG	50/144/440 MHz	HF - 100w 50 MHz - 100w 144 MHz - 50w 440 MHz - 20w	Yes	Yes	Yes
	IC-703	50 MHz	10 watts	Yes	No	No
Kenwood	TS-50	No	100 watts	Yes	No	No
	TS-480	50 MHz	HF - 200w 50 MHz - 100w	Yes	Yes	No
Vertex Standard (Yaesu)	FT-100	50/144/440	HF - 100w 50 MHz - 100w 144 MHz - 50w 440 MHz - 20w	Yes	Yes	No
	FT-817	50/144/440	5 watts	Yes	No	Yes
	FT-857	50/144/440	HF - 100w 50 MHz - 100w 144 MHz - 50w 440 MHz - 20w	Yes	No	Yes
	FT-897	50/144/440	HF - 100w 50 MHz - 100w 144 MHz - 50w 440 MHz - 20w	Yes	No	No

Daytime/Night-time HF Band Usage

HF Band	*Daytime*	*Night-time*
160-, 80-, and 60-meters (1.8, 3.5, and 5 MHz)	Local and Regional out to 100-200 miles	Local to long-distance with DX best near sunset or sunrise at one or both ends of the contact
40- and 30-meters (7 and 10 MHz)	Local and Regional out to 300-400 miles	Short-range (20 or 30 miles) and medium distances (150 miles) to world-wide.
20- and 17-meters (14 and 18 MHz)	Regional to long-distance. Bands will open at or near sunrise and close at night.	20-meters is often open to the west at night and may be open 24 hours a day.
15-, 12-, and 10-meters (21, 24, and 28 MHz)	Primarily long-distance (1000 miles and more). Bands open to the east after sunrise and to the west in the afternoon.	10-meters is often used for local communications 24 hours a day.

LIST OF REFERENCES

Antennas

The ARRL Antenna Book, published by the ARRL is another ham radio classic, now in its 20th edition. It covers everything from basic antenna and transmission line theory to propagation and advanced antenna design. There are useful construction projects in every chapter. The ARRL publishes an antenna "*Classics*" and "*Compendium*" series which are primarily construction project articles.

Backyard Antennas by Peter Dodd G3LDO is a great book on getting good performance from compact antennas that fit in limited space, perfect for the surburban or urban ham.

L.B. Cebik W4RNL is a prolific author on antenna modeling and design. He has compiled a large number of articles on his Web site at http://www.cebik.com.

Mark Connelley WA1ION specializes in receiving antennas and electronics for ham and SWL antennas. His Web site at http://www.qsl.net/wa1ion has many design articles and references to other useful site, as well as a list of electronics design links.

Antenna Zoning for the Radio Amateur, by Fred Hopengarten K1VR - a detailed guide to the process of working with local zoning regulations to obtain permits for amateur antennas and towers.

Digital Modes

Tucson Amateur Packet Radio (TAPR) is the biggest ham group specializing in the "digital modes". Their Web site at http://www.tapr.org is a smorgasboard of information about all of the popular digital protocols.

PSK31 - Neil Rosenberg K1VY has put together a comprehensive site on PSK31 at http://psk31.com. There are quite a few descriptive articles and construction projects, as well as links to other digital data sites.

DX-ing Resources

The Complete DXer, by Bob Locher W9KNI should be read by every budding DX-er to learn the basics of DXing and good operating.

DXsummit.com is a world-wide DX spotting Web site where hams post "heard" reports on every band from every land 24 hours a day. The reports, known as *spots*, are searchable by call and band. The site also records solar data for propagation information.

Passport to World Band Radio - 2005, published by International Broadasting Services is the standard reference guide for shortwave broadcast listeners.

Propagation

The New Shortwave Propagation Handbook, by Jacobs, Cohen, and Rose - covers HF propagation from introductory levels to advanced topics. George Jacobs W3ASK wrote the CQ Magazine "Propagation" column for many years.

The Little Pistol's Guide to HF Propagation, by Robert R. Brown, NM7M, Worldradio Books - explains HF propagation to the interested newcomer to shortwave operations.

The RSGB Propagation Page at http://www.keele.ac.uk/depts/por/psc.htm, has numerous links to information on HF and VHF/UHF propagation.

Spaceweather - (http://www.spaceweather.com) - news and information about the Sun and the ionosphere. Links to real-time satellite photos and information. You can also subscribe to email alerts and data updates.

The Web site known as **hfradio.org** at http://www.hfradio.org/propagation.html is a comprehensive site focused on HF propagation. Includes forecasts, discussion on ongoing events, numerous charts and graphs showing historical behavior.

ARRL Propagation Bulletin - a weekly bulletin about HF propagation, free to ARRL members (http://www.arrl.org/w1aw/prop)

Mobile Operation

Your Mobile Companion, by Roger Burch WF4N - provides introduction to mobile operating, including how to set up the mobile station and operating guidelines.

The Mobile DXer, by Dave Mangels AC6WO - shows how to do high-performance operating on the road, including tips on how to compete with the home stations.

Operating

The FCC Rule Book, published by the ARRL - explains in clear text what the regulations mean and how they are to be applied. Includes the actual text of the Part 97 rules.

Ham Radio for Dummies, by Ward Silver NØAX (Wiley Press)

Two-Way Radios and Scanners for Dummies, by Ward Silver NØAX (Wiley Press, avail. 8/05)